EDITORIAL

COVID-19 Pandemic, the Value of Open Access to Research, and Role of Agile Peer Review

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The emergence of the Internet has changed the landscape of academic publishing. Digitalization facilitated peer review, publishing procedures, and content retrieval (Suber 2012). However, the majority of academic articles were brought behind pay walls, thus remaining inaccessible to a wider audience. This initiated another approach towards academic publishing in the early 1990s when the open access movement was conceived. Its protagonists, underlining the openness as a fundamental scientific ethos, launched open access publishing venues to provide free usage of scholarly content (Bjork, 2018).

In the last 15 years the share of open access content has increased. The benefit of open science has been confirmed by numerous studies showing that open access articles receive more citations than articles published under the pay-to-read model (Piwowar et al. 2018; McKiernan et al. 2016; Tennant, 2017). Thousands of open access journals have been launched or transitioned to open access. Even some of the traditional publishers decided to offer "hybrid open access" options for some of their journals. It means that authors can choose to pay publication charges and make their articles open to read. Furthermore, funders such as the National Institutes of Health, the European Commission, and the US National Science Foundation have made open access publications the mandatory standard for their grantees (Piwowar et al. 2018). Universities and countries started the cancellation of their agreements with

some of the traditional publishers due to the high costs of subscriptions.[1] Open access publishing model is not flawless. High publication charges and emergence of journals with questionable publishing practices are imposing as real challenges. However, Nestor et al. 2020 would conclude that immediate access to research is important for scientific advancement.

On the other hand, a significant part of scholarly content still remains behind the pay wall due to reasons such as profit generation (Nestor et al. 2020).

However, the availability of scholarly content is under a novel and valuable change during the outgoing pandemic. The COVID-19 outbreak triggered initiatives for those publishers, who still resist to open-access model, to make the relevant research immediately available to the public.[2]

Major publishers, who publish a significant part of the global academic output, responded by unlocking their academic content related to the coronavirus, making it free to be used. This applies to books and journal articles in various academic disciplines, which are already published but remained under the pay-to-read model. It also applies to academic output, which will be published in the forthcoming period. Even more, some of the open access publishers, which charge authors for publication, have committed to publishing the articles related to the coronavirus free of charge. Some of this research may provide scientific advances to support the eradication of the COVID-19 pandemic.[3]

Even though the new open access standards apply only for content connected to the COVID-19 virus, this represents a valuable change in the area of academic publishing. It is certainly another acknowledgement to open science, coming from traditional publishers, as a necessity for faster dissemination of scientific information and coping with the societal challenges.

Furthermore, one of the most criticized aspects of peer review is the inertness of the review and publishing process (Lotriet, 2012). Firstly, it takes weeks and sometimes months for authors to receive information as to whether their article fits within the journal`s scope. This is considered a major reason of time loss. Secondly, Ware and Mabe (2015) argue that a reviewer needs from several hours to a day to prepare a review report. However, the time from submission to the first decision varies from 8 weeks to 18 weeks and it varies by academic disciplines. Nguyen et. al. (2015) concluded that even though the authors expected a decision within 6 weeks from the submission, the average time they had to wait to receive a decision was 14 weeks. Finally, the limited

[1]https://www.editage.com/insights/norway-joins-the-ranks-of-germany-and-sweden-cancels-subscription-with-elsevier

[2] https://wellcome.ac.uk/coronavirus-covid-19/open-data

[3] https://publishers.org/aap-news/covid-19-response/

resources of the editorial offices and busy academic careers of the editors additionally delay the peer review procedure (Huisman and Smits, 2017).

All this makes the peer review process slow and inefficient. It certainly has a negative impact not only on the academic careers of researchers, dependent on publication of their academic output, but on the process of communicating important information and knowledge within society.

Nevertheless things are changing with the ongoing pandemic. In January 2020 alone, at least 54 papers on coronavirus have been published. Even though many of them are preprints there are also peer-reviewed articles including articles published in top-tier journals (Stoye, 2020). It is clear that these papers underwent peer review, editing and production in less than a month. In February and March, the number of newly published peer reviewed articles on coronavirus soared. Some medical journals decreased publication time up to 80% (Horbach, 2020).

This implies that during this pandemic, many publishers, especially those maintaining lengthy peer review procedures, decided to take a new approach on the submissions related to the pandemic. They reduced the unnecessary time loss, prioritizing the COVID-19 related submissions and providing an agile communication, peer review procedure and production process. The outcome is the publication of peer-reviewed content much faster than the usual. On the other hand the speed of peer review in other domains such as humanities and social sciences was reduced.

Academic publishing is overcoming some of its weaknesses during the pandemic. Joint efforts and willingness enabled wider usage of scientific discoveries and have confirmed the importance of open science again. A better face of the peer review process has been presented by the inclusion of coronavirus-related articles within a reasonable timeframe. This event has not only confirmed the necessity of a more efficient peer review process but it also demonstrated its practical application.

The academic publishing has been enhanced during the time of this pandemic. Time will tell whether this trend will continue and how applicable it will be in other academic domains. It is certain that it will depend on the stakeholders.

References:

1. Bjork B.C. (2018) Is open Access the future of scholarly journal publishing?, The Southwest Respiratory and Critical Care, 6(25), 3–4.
2. Horbach, S. P.J.M. (2020). Pandemic Publishing: Medical journals drastically speed up their publication process for Covid-19. bioRxiv 2020.04.18.045963; doi: https://doi.org/10.1101/2020.04.18.045963
3. Huisman, J., Smits, J. (2017) Duration and quality of the peer review process: the author's perspective. Scientometrics 113, 633–650.

4. Lotriet, C. J. (2012). Reviewing the review process: Identifying sources of delay. Australasian Medical Journal, 5(1), 26–29.
5. McKiernan, E. C., Bourne, P. E., Brown, C. T., Buck, S., Kenall, A., Lin, J., McDougall, D., Nosek, BA., Ram, K., Soderberg, KC., Spies, JR., Thaney, K., Updegrove, A., Woo, KH., & Yarkoni, T. (2016). How open science helps researchers succeed. eLife, 5. doi:10.7554/elife.16800.
6. Nestor, M. S., Fischer, D., Arnold, D., Berman, B., & Del Rosso, J. Q. (2020). Rethinking the journal impact factor and publishing in the digital age. The Journal of Clinical and Aesthetic Dermatology, 13(1), 12–17.
7. Nguyen, V. M., Haddaway, N. R., Gutowsky, L. F. G., Wilson, A. D. M., Gallagher, A. J., Donaldson, M. R., … Cooke, S. J. (2015). How Long Is Too Long in Contemporary Peer Review? Perspectives from Authors Publishing in Conservation Biology Journals. PLOS ONE, 10(8), e0132557. doi:10.1371/journal.pone.0132557
8. Piwowar, H., Priem, J., Larivière, V., Alperin, JP., Matthias, L., Norlander, B., Farley, A., West, J., & Haustein, S. (2018). The state of OA: a large-scale analysis of the prevalence and impact of Open Access articles. PeerJ.
9. Stoye, E., (2020). China coronavirus: how many papers have been published?. Nature. 2020; (published online Jan 30), DOI: 10.1038/d41586-020-00253-8.
10. Suber P. (2012). Open Access. MIT Press, 230p, https://mitpress. mit.edu/books/open-access.
11. Tennant, J., (2017). The open access citation advantage. 2017. [2 August 2017]. https://www.scienceopen.com/search#%7B%22order%22%3A0%2C%22context%22%3A%7B%22collection%22%3A%7B%22id%22%3A%22996823e0-8104-4490-b26a-f2f733f810fb%22%2C%22kind%22%3A0%7D%2C%22kind%22%3A11%7D%2C%22kind%22%3A77%7D
12. Ware, M., & Mabe, M. (2015). The STM report: An overview of scientific and scholarly journal publishing. The Hague: International Association of Scientific, Technical and Medical Publishers.
13. http://www.stm-assoc.org/2012_12_11_STM_Report_2012.pdf.
14. https://www.editage.com/insights/norway-joins-the-ranks-of-germany-and-sweden-cancels-subscription-with-elsevier
15. https://wellcome.ac.uk/coronavirus-covid-19/open-data
16. https://publishers.org/aap-news/covid-19-response/